



Katie M. Brown
Counsel

Duke Energy
40 W. Broad Street
DSC 556
Greenville, SC 29601

O: 864-370-5296
F: 864-370-5027

Katie.Brown2@duke-energy.com

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VIA ELECTRONIC FILING

The Honorable Jocelyn G. Boyd
Chief Clerk/Executive Director
Public Service Commission of South Carolina
101 Executive Center Drive, Suite 100
Columbia, SC 29210

**Re: Public Service Commission Review of South Carolina Code of Regulations
Chapter 103 Pursuant to S.C. Code Ann. Section 1-23-120(J)
Docket Number: 2020-247-A**

Dear Ms. Boyd:

Pursuant to the Notice of Review filed in the above-referenced docket, Duke Energy Carolinas, LLC ("DEC") and Duke Energy Progress, LLC ("DEP") (together, the "Companies") respectfully submit the following comments on Article 3 of the Commission's regulations. The Companies appreciate the opportunity to provide input in this process and will participate in the workshop scheduled for April 16, 2021.

103-321 Meter Requirements

S.C. Code Ann. Regs. 103-321 requires electrical utilities to read meters and render bills on a monthly basis of not less than twenty-eight nor more than thirty-four days, unless prevented by extenuating circumstances. The Companies propose deleting the reference to "not less than twenty-eight nor more than thirty-four days" because it is unnecessary given the reference to monthly billing.

103-321. Meter Reading.

Unless extenuating circumstances prevent, meters shall be read and bills rendered on a monthly basis ~~not less than twenty-eight days nor more than thirty-four days~~.

103-322 Meter Reading Data

With the deployment of Advanced Metering Infrastructure (“AMI”) now complete in the Companies’ South Carolina service territory, the Companies continue to review and analyze rate designs that offer customers opportunities to respond to real time price signals to achieve a lower cost for electric service. The calculation of bills on a dynamic rate design now available with AMI have billing determinants that may change during the billing period. Under such rate designs, usage data, not meter readings, is used to calculate the customer’s bill. On that basis, the Companies recommend that S.C. Code Ann. Regs. 103-322 should be updated as set forth below to reflect that interval billed rates do not utilize meter readings for calculations of usage or billing.

103-322. Meter Reading/Usage Data.

The Meter Reading Data maintained by the electrical utility shall include:

- a. Customer’s name, service address and rate schedule designation.
- b. Identifying number and/or description of the meter(s).
- c. Meter readings or usage values.
- d. If the reading has been estimated.
- e. Location of meter or special reading instructions, if applicable.

103-330. Customer Information.

The Companies recommend updating S.C. Code Ann. Regs. 103-330 to reflect that the Companies no longer have field offices where customers can apply in person to start service, as redlined below:

103-330. Customer Information.

Each electrical utility shall:

- a. Maintain up-to-date maps, plans, or records of its entire transmission and distribution systems, with such other information as may be necessary to enable the electrical utility to advise prospective customers, and others entitled to the information, as to the facilities available for serving customers within its operating area.
- b. Provide to each new residential and small commercial customer, within sixty days of application for service, a clear and concise explanation of the available rate schedules for the class of service for which the customer makes application for service.

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c. Provide to each residential and small commercial customer to whom more than one rate schedule is reasonably available a clear and concise summary of the existing rate schedules applicable to the customer's class of service at least once a year.

d. Notify each affected customer of any proposed adjustment in rates and charges, excluding adjustment of base rates for fuel costs within sixty days of the date of the filing of such adjustment or as otherwise directed by the commission.

e. Provide to each customer, upon request, a clear and concise statement of the actual consumption of electrical energy by such customer for the previous twelve months.

f. Post a notice in a conspicuous place ~~on the utility's website in each office of the electrical utility where applications for service are received~~, informing the public that copies of the rate schedules and rules relating to the service of the electrical utility, as filed with and approved by the commission, are available for inspection and download.

g. Upon request, inform its customers as to the method of reading meters, as to billing procedures and shall assist customers in selecting the most economical rate schedule applicable and method of metering the service, except as otherwise provided for by the commission.

h. Provide adequate means (telephone, etc.) whereby each customer can contact the electrical utility or its authorized representative at all hours in cases of emergency or unscheduled interruptions of service.

i. Upon request, give its customers such information and assistance as is reasonable in order that customers may secure safe and efficient service.

j. Notify any person making a complaint recorded pursuant to 103-345 that the electrical utility is under the jurisdiction of the commission and the customer may notify the ORS of the complaint.

103-339. Customer Billing

S.C. Code Ann. Regs. 103-339 outlines how customers should be billed and what information should be included on customers' bills. Because the majority of the Companies' meters are now remotely interrogated and not read onsite, the Companies recommend that 103-339(1) be amended to reflect this practice.

S.C. Code Ann. Regs. 103-339(2) mandates that all bills show "[t]he reading of the meter at the beginning and at the end of the period for which the bill is rendered" as well as "[t]he date on which the meter was read." This form of showing the meter readings for the beginning and the end of the billing period is commonly associated with scalar billing. However, the calculation of bills on a dynamic rate design, including time-of-use rates and those with a demand component,

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reflect billing determinants that may change during the billing period. For interval billing, the bill is calculated by summing the consumption recorded by the meter in 30-minute intervals for the bill period, including relevant billing determinants such as demand and time-of-use, and the beginning and ending meter readings are not relevant. Accordingly, the Companies believe that S.C. Code Ann. Regs. 103-339-(2) should be amended to reflect how the calculation of bills on a dynamic rate design now available with new smart meters may have billing determinants that may change during the billing period. Under such rate designs and with new meters, meter readings are not used to calculate the customer's bill. This practice is already reflected in DEC's currently approved service regulations, which provide as follows: "Billing statements will show the readings of the meter at the beginning and end of the billing period, except; however, when interval load data is used to determine the bill under certain rate schedules or riders, only the billing units may be shown."

103-339. Customer Billing.

The electrical utility shall bill each customer as promptly as possible ~~following the reading of the meter and~~ after the end of the billing period and render a receipt of payment upon request.

1. New Service. Meters shall be read or interrogated remotely at the initiation and termination of any service and billing shall be based thereon.

2. Bill Forms. The bill shall show:

a. The reading of the meter at the beginning and at the end of the period for which the bill is rendered, except for interval billing rates, which will provide the total usage for the period for which the bill is rendered.

b. The date on which the meter was read or usage was last obtained from the meter, and the date of billing and the latest date on which it may be paid without incurring a penalty, and the method of calculating such penalty.

c. The number and kind of units metered.

d. The applicable rate schedule, or identification of the applicable rate schedule. If the actual rates are not shown, the bill shall carry a statement to the effect that the applicable rate schedule will be furnished on request.

e. Any estimated usage shall be clearly marked with the word "estimate" or "estimated bill".

f. Any conversions from meter reading units to billing units or any information necessary to determine billing units from recording or other devices, or any other factors used in determining the bill. In lieu of such information on the bill, a statement

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must be on the bill advising that such information can be obtained by contacting the electrical utility's local office.

g. Amount for electrical usage (base rate).

h. Amount of South Carolina Sales Tax (dollars and cents).

i. Total amount due.

j. Number of days ~~for which a bill is rendered or beginning and ending dates for the billing period~~ covered by the bill.

3. Late Payment Charges. A charge of no more than one and one-half percent (1 1/2 %) may be added to any unpaid balance not paid within twenty-five days of the billing date to cover the cost of collection and carrying accounts in arrears. This method of late-payment charge will be made in lieu of any other penalty.

4. Payment. The electrical utility, at its option for good cause, may refuse to accept a check, debit card, credit card or other electronic payment tendered as payment on a customer's account. "Good cause" must be justified by an electrical utility by evidencing a credit history problem or by evidencing insufficient funds of the utility customer or applicant.

5. Charges for Discontinuance and Reconnection. Whenever service is turned off for violation of rules and regulations, nonpayment of bills, or fraudulent use of service, the electrical utility may make reasonable charges, to be approved by the commission, for the cost incurred in discontinuing the service and reconnection and require payment for service billed and for service used which has not previously been billed.

6. Estimated Bills. Each electrical utility shall not send a customer an estimated bill, except for a good cause, where the meter could not be read or was improperly registering. In no instance will more than three consecutive estimated bills be rendered ~~within a sixty-day period~~, unless otherwise agreed to by the customer, or unless the utility makes a good faith attempt to read the meter and is unable to gain access to the meter, or unless inclement weather or other natural event would compromise the safety of the utility's meter reading personnel.

103-352. Procedures for Termination of Service

The Companies recommend updating section (g) to address how disconnections are conducted with AMI meters.

103-352. Procedures for Termination of Service.

g. ~~For remote and non-remote capable meters~~, electric service may be terminated ~~only on~~ Monday through ~~Thursday~~ Friday between the hours of 8:00 a.m. and 4:00 p.m. ~~unless provisions have been made for the availability of the acceptance of payment and the reconnection of service. Electric service may not be terminated on the day preceding any day on which the electric utility's collection offices are closed, unless provisions have been made for the availability of the acceptance of payment and the reconnection of service. For non-remote capable meters, where a site visit is necessary to disconnect service, All employees of electrical utilities assigned to terminate service shall be authorized to accept payment from customers subject to termination of service allow customers time to make an acceptable payment or in lieu thereof, at the electrical utility's option, allow such customer at least one full working day beyond the initial date set for termination the opportunity to make satisfactory arrangements on the account at the offices of the electrical utility; provided, however, that in certain areas where it has been determined by the electrical utility that the safety of its employees warrants it, those employees shall not be required to accept payments from customers subject to termination.~~

103-370. Electrical Utility Inspection and Tests

The Companies have suggested minor edits to 103-370(1) to correct the reference to the American National Standards Institute ("ANSI") Standard C.12.1 – Code for Electricity Metering.

103-370. Electrical Utility Inspection and Tests.

Each electrical utility shall make such tests as are prescribed under these rules with such frequency and in such manner and at such places as is herein provided or requested by the ORS or as may be approved or ordered by the commission.

1. All electric meters shall be tested and calibrated under the applicable periodic or sample testing plan as prescribed by the American National Standards Institute (ANSI) Standard C12.1 - Code ~~for-of~~ Electricity Meter~~ings~~. Results from sample-tested meters shall be communicated to the ORS on an annual basis.

2. Meter Testing on Request of Customers.

A. Each electrical utility shall, at any time (when requested in writing by a customer) upon reasonable notice, test the accuracy of the meter in use by him.

B. No deposit or payment shall be required from the customer for such meter test except when a customer requests a meter test within one year after date of installation or the last previous test of a meter, in which case he shall be required upon request by the electrical utility to deposit the estimated cost of the test, but not to exceed \$15.00 without approval of the commission. The amount so deposited with the electrical

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utility shall be refunded or credited to the customer, if the meter is found, when tested, to register more than 2% fast or slow, otherwise the deposit shall be retained by the electrical utility.

C. A customer may request to be present when the electrical utility conducts the test on his meter, or if he desires, may send a representative appointed by him. The electrical utility shall honor such request.

D. A report giving the name of the customer requesting the test; the date of the request; the location of the premises where the meter has been installed; the type, make, size, and serial number of the meter; the date of removal; the date tested; and the result of the test shall be kept by the electrical utility.

103-373. Test Procedures and Accuracies

The Companies propose amending S.C. Code Ann. Regs. 103-373(1) to align the regulation with the four methods prescribed by the American National Standards Institute ("ANSI") Standard C-12.1 – Code for Electricity Metering.

103-373. Test Procedures and Accuracies.

1. Method of Determining Average Error of Meters.

~~A. Field testing the average error of a service watt-hour meter shall be determined as follows: The error at Light Load, here defined as approximately 10% of the rated capacity (Test Amperes) of the meter, shall be determined by taking the average of at least two errors determined from as many separate tests on the same Light Load, which error must agree within one-half percent (1/2 %).~~

~~In the same manner, the error at Full Load, here defined as approximately the rated capacity (Test Amperes) of the meter, shall be determined. The average error of the meter shall then be determined by taking the average error at Light Load plus four times the error at Full Load (Test Amperes) and dividing this sum by five, proper consideration being taken of the sign of the two errors.~~

~~B. Meter Shop Testing—When an electronic test board is used, the average error of a watt-hour meter shall be determined as follows: The error at Light Load, here defined as approximately 10% of the rated capacity (Test Amperes) of the meter, shall be determined. The error at Full Load, here defined as approximately the rated capacity of the meter or Test Amperes, shall be determined. The average error of the meter shall then be determined by taking the error at Light Load plus four times the error at Full Load (Test Amperes) and dividing this sum by five, proper consideration being taken of the sign of the two errors.~~

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- A. The average percent registration of a watt hour meter shall be determined using one of the following methods prescribed by the American National Standards Institute (ANSI) Standard C-12.1 – Code for Electricity Metering, where “FL” means the percent registration at full load test amps and unity power factor, “LL” means the percent registration at light load test amps (10% of full load test amps) and unity power factor, and “PF” means the percent registration at full load test amps and 50% power factor:
- 1) Method 1: Average percent registration = $(4FL + LL)/5$
 - 2) Method 2: Average percent registration = $(FL + LL)/2$
 - 3) Method 3: Average percent registration = registration at a single load point when this single load point represents the registration within the range.
 - 4) Method 4: Average percent registration = $(4FL + 2LL + PF)/7$.

The Companies appreciate the opportunity to comment on this matter and look forward to discussing these proposed changes at the Commission’s workshop on April 16.

Sincerely,



Katie M. Brown

cc: Parties of record